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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/815,233	03/31/2004	Yen-Fu Chen	AUS920031048US1	8121

87173   7590   09/02/2009
Greg Goshorn, P.C.
9600 Escarpment
Suite 745-9
Austin, TX 78749

EXAMINER
JACOB, MARY C

ART UNIT	PAPER NUMBER
2123	

MAIL DATE	DELIVERY MODE
09/02/2009	PAPER

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PTOL-90A (Rev. 04/07)

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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/815,233
Filing Date: March 31, 2004
Appellant(s): CHEN ET AL.

Gregory K. Goshorn
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 7/16/09 appealing from the Office Action

mailed 9/22/08.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial

proceedings which will directly affect or be directly affected by or have a bearing on the

Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection

contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is

substantially correct. Appellant appears to have left out dependent claim 20 from the

list of rejected dependent claims. The changes are as follows:

Page 14:

"1. Whether a group of claims consisting of independent claims 1, 13, and 21 and

dependent claims 2-4, 7, 8, 10, 12, 14-18, **20**, 22-25 and 27 is unpatentable..."

Page 17:

"Claims 2-4, 7, 10, 12, 14-17, **20**, 22-24 and 27

Claims 2-4, 7, 8, 10, 12, 14-18, **20**, 22-25 and 27 are each allowable because

each depends upon one of the allowable independent claims. For both the reasons

stated above and those explained in conjunction with claims 1, 13 and 21, Appellants

respectfully request reversal of the §103(a) rejection of claims 2-4, 7, 8, 10, 12, 14-18,

20, 22-25 and 27."

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

Chandra et al, "An Online Optimization-based Technique for Dynamic

Resource Allocation in GPS Servers", Technical Report UM-CS-2002-030,

University of Massachusetts, July 2002

D'Arienzo et al, "Automatic SLA Management in SLA-Aware Architecture",

10th International Conference on Telecommunications, 23 Feb-1 March 2003, Vol.

2, pages 1402-1406

Nargarajan et al, "Modelling and Simulation of an Alarm Based Network

Management System for Effective SLA Monitoring and Management", SCI 2003,

7th World Multiconference on Systemics, Cybernetics and Informatics

Proceedings, July 27-30, 2003

6,466,898	Chan	10-2002
6,816,905	Sheets et al	11-2004
6,701,342	Bartz et al	3-2004

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-4, 7, 8, 10, 12-18, 20-25 and 27 are rejected under 35 U.S.C. 103(a)

as being unpatentable over Chandra et al ("An Online Optimization-based Technique for

Dynamic Resource Allocation in GPS Servers", Technical Report UM-CS-2002-030,

University of Massachusetts, July 2002) in view of D'Arienzo et al ("Automatic SLA

Management in SLA-Aware Architecture", 10th International Conference on

Telecommunications, 23 Feb-1 March 2003, Vol. 2, pages 1402-1406).

As to **Claims 1, 2, 13, 14 and 21** Chandra et al teaches: a method for predicting

service level in a utility computing environment having a dynamically allocated subset of

computing resources from a set of available computing resources, the method

comprising the steps of: creating a resource profile corresponding to a dynamically

allocated subset of computing resources allocated according to a service level

agreement (page 1, column 2, paragraph 2, lines 18-29; page 2, section A, lines 1-10;

pages 2-3, "Problem Definition", paragraphs 1-3; page 7, "Simulation Setup and

Workload Characteristics", paragraph 1, lines 1-2; page 9, column 1, lines 4-9); loading

a workload profile representing a hypothetical demand profile for the enterprise (page 3,

"Dynamic Resource Allocation", paragraph 1; page 5, "Workload Prediction

Techniques", paragraph 2; page 7, "Simulation Setup and Workload Characteristics",

paragraph 2, lines 1-2); and simulating the processing of the workload profile, wherein

the workload profile is based upon actual, measured data (page 5, "Workload Prediction

Techniques", paragraph 2; page 7, "Simulation Setup and Workload Characteristics",

paragraph 2, lines 1-5), using the resource profile to produce a service level result,

wherein the resource profile resource subset is modified during the simulation according

to the service level agreement and based upon the service level result (page 7,

"Simulation Setup and Workload Characteristics", paragraph 1, lines 1-2, paragraph 2,

lines 1-2; pages 8-9, sections C and C.1; page 10, section C.2, last paragraph). As to

logic and memory, it is concluded that since Chandra teaches that the prediction and

allocation techniques are simulated using various simulation packages (page 7, section

A, paragraph 1), it is understood that memory and logic are present to store the

simulation program, algorithms, and system parameters, and that logic is present within

the simulation software to perform the simulation operations as disclosed in the

limitations.

Chandra et al does not expressly teach: (claims 1, 13 and 21) generating a new service level agreement in the event the resource profile cannot process the workload profile at an expected service level corresponding to the service level agreement, wherein the new service level agreement will process the workload profile at an expected service level and (claims 2, 14 and 21) comparing the service level result to a (second) service level agreement and signaling whether the computing resource profile will process the workload profile at an expected service level corresponding to the (second) service level agreement.

D'Arienzo et al teaches an automatic mechanism for Service Level Agreement (SLA) management that can lead to cost reduction and enable the creation of short term services (Conclusions, lines 7-9) as an improvement to current interconnections among IP networks that are established by means of SLAs which require high manual overhead and a high associated cost and cause a non-optimized resource allocation of resources within the network (Abstract, lines 7-12). D'Arienzo et al teaches that a SLA is monitored and in the case of modified conditions with respect to either the quality of service offered for that particular service or the price agreed (the service level is compared to the service level agreement and it is determined whether the computing resources will process the workload profile at the expected service level), the SLA in question can either be re-negotiated or replaced by a brand new one (page 1405, column 2, paragraph 1, lines 7-11).

Chandra et al and D'Arienzo et al are analogous art since they are both directed

to the management of network resources to meet quality of service requirements.

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to modify the method of predicting service level in a utility

computing environment having a dynamically allocated subset of computing resources

from a set of available computing resources as taught in Chandra et al to further

compare a service level result to a (second) service level agreement and to generate a

new service level agreement if it is determined that the service level result does not

process the workload profile at the expected level of service corresponding to the SLA

as taught in D'Arienzo et al since D'Arienzo et al teaches an automatic mechanism for

Service Level Agreement (SLA) management that can lead to cost reduction and enable

the creation of short term services (Conclusions, lines 7-9) as an improvement to

current interconnections among IP networks that are established by means of SLAs

which require high manual overhead and a high associated cost and cause a non-

optimized resource allocation of resources within the network (Abstract, lines 7-12).

As to **Claims 3, 15 and 22**, Chandra et al in view of D'Arienzo et al teaches:

wherein the subset of computing resources includes allocated processing resources

and memory resources for a client account (Chandra et al: page 2, section A, lines 1-10,

lines 17-21).

As to **Claim 4**, Chandra et al in view of D'Arienzo et al teaches: wherein the

service level agreement includes a base resource allocation (Chandra et al: page 3,

column 1, lines 1-5; page 4, column 1, "ii"), a maximum resource allocation (Chandra et

al: page 4, column 1, "ii"), resource costs (Chandra et al: page 4, column 1, last 4 sentences-column 2, line 2) and rules for dynamically reallocating the resources based upon workload demand (Chandra et a: pages 3-4, "Allocating Resource Shares to Applications", paragraphs 1-2).

As to **Claims 7, 17 and 24**, Chandra et al in view of D'Arienzo et al teaches: wherein the set of computing resource profile also includes communication bandwidth allocation (Chandra et al: page 2, section A, lines 17-21).

As to **Claims 8, 18 and 25**, Chandra et al in view of D'Arienzo et al teaches: the step of comparing the workload profile to a second workload profile representing an actual demand profile for a second client account wherein the simulating step is based upon a result of the comparison step (Chandra et al: page 9, section C.2, paragraphs 1 and 2; Figures 8 and 9).

As to **Claims 10, 20 and 27**, Chandra et al in view of D'Arienzo et al teaches: wherein the workload profile includes scheduling information and the simulation step incorporates the scheduling information in the processing (Chandra et al: pages 2-3, "Problem Definition", paragraph 3; pages 8-9, section C.1).

As to **Claim 12**, Chandra et al in view of D'Arienzo et al teaches: wherein the workload profile is loaded from a configuration file (Chandra et al: page 7, section A, paragraphs 1 and 2).

As to **Claims 23 and 16**, Chandra et al in view of D'Arienzo et al teach: wherein the computing resource profile further comprises: a base resource allocation (Chandra et al: page 3, column 1, lines 1-5; page 4, column 1, "ii"); a maximum resource

allocation (Chandra et al: page 4, column 1, "ii"); resource costs (Chandra et al: page 4,

column 1, last 4 sentences-column 2, line 2); and rules for dynamically reallocating the

resources based upon workload demand (Chandra et al: pages 3-4, "Allocating

Resource Shares to Applications", paragraphs 1-2).

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chandra

et al in view of D'Arienzo et al as applied to claim 1 above, further in view of Chan (US

Patent 6,466,898).

Chandra et al in view of D'Arienzo et al teaches simulating the processing of a

workload profile using a resource profile to produce a service level result.

Chandra et al in view of D'Arienzo et al does not expressly teach wherein the

simulation is scheduled to run automatically at an off-peak time.

Chan teaches an HDL simulator that provides simulation job scheduling on a

local and/or remote platform that allows designers to balance the work loads on their

network resources by scheduling simulation runs at off-peak hours as well as to

automate the regular regression testing of their designs (column 4, lines 33-39; column

14, line 51-column 15, line 3).

Chandra et al in view of D'Arienzo et al and Chan et al are analogous art since

they are both directed to the running of simulations.

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to modify the simulating of the processing of a workload profile

using a resource profile to produce a service level result as taught in Chandra et al in

view of D'Arienzo et al to further include scheduling the simulation to run automatically

at an off-peak time as taught in Chan since Chan teaches that job scheduling allows

designers to balance workloads on their network resources by scheduling simulation

runs at off-peak hours (column 4, lines 33-39; column 14, line 51-column 15, line 3).

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chandra

et al in view of D'Arienzo et al as applied to claim 1 above, further in view of Sheets et al

(US Patent 6,816,905).

Chandra et al in view of D'Arienzo et al teaches a resource profile corresponding

to a first subset of computing resources allocated according to a service level

agreement, loading a workload profile representing a demand profile for an enterprise

and simulating the processing of a workload profile using a resource profile to produce a

service level result.

Chandra et al in view of D'Arienzo et al does not expressly teach the step of

determining a cost associated with meeting the service level agreement.

Sheets et al teaches a method and system for operating a hosted service

provider for the internet that is capable of dynamically reallocating servers across

multiple disparate customer accounts to provide hosted services with a more

economical and flexible server farm management (column 6, lines 19-23; column 7,

lines 9-13) wherein the cost associated with meeting a service level agreement is

determined (column 18, lines 60-67).

Chandra et al in view of D'Arienzo et al and Sheets et al are analogous art since

they are both directed to dynamic reallocation of resources in a shared data center.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the simulating of a workload profile using a resource profile to produce a simulation result as taught by Chandra et al in view of D'Arienzo et al to further include determining the cost associated with meeting a service level agreement as taught by Sheets et al since Sheets et al teaches a method and system for operating a hosted service provider for the internet that is capable of dynamically reallocating servers across multiple disparate customer accounts to provide hosted services with a more economical and flexible server farm management (column 6, lines 19-23; column 7, lines 9-13).

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chandra et al in view of D'Arienzo et al as applied to claim 1 above, and further in view of Nargarajan et al ("Modelling and Simulation of an Alarm Based Network Management System for Effective SLA Monitoring and Management", SCI 2003. 7th World Multiconference on Systemics, Cybernetics and Informatics Proceedings, July 27-30, 2003).

Chandra et al in view of D'Arienzo et al teach a method for predicting service level in a utility computing environment wherein the method includes leading a workload profile representing a demand profile for an enterprise and simulating processing of the workload profile using a resource profile corresponding to a subset of computing resources allocated according to a service level agreement.

Chandra et al in view of D'Arienzo et al does not expressly disclose: (claim 11) wherein the workload profile includes information corresponding to one or both of prioritization of resources and importance of specific resources.

Nagarajan et al teaches simulation as an important process in documenting service level agreements (SLA) since simulation studies allow an Internet Service Provider (ISP) to verify their SLA agreements and check if it meets customer expectations and whether the specified service could be provided (section 1, paragraph 2, lines 4-6), wherein the simulation techniques include comparing the service level result to a service level agreement and signaling whether the computing resource profile will process the workload profile at an expected service level corresponding to the service level agreement (section 3, last paragraph, lines 10-12; page 5, column 2, lines 3-9; section 6.2, paragraph 1, lines 1-1-9) and wherein the workload profiles simulated include information corresponding to one or both of prioritization of resources and importance of specific resources (page 2, "The type of scenarios examined in this SLA simulation study", items 2 and 3; page 4, column 1, lines 2-7).

Chandra et al in view of D'Arienzo et al and Nagarajan et al are analogous art since they are both directed to the testing of an ISP's allocation of resources and whether they satisfy workload demand and the expected service level corresponding to a service level agreement.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the simulating of processing a workload profile using a resource profile to produce a service level result as taught in Chandra et al in view of

D'Arienzo et al to further include wherein the simulated workload profile includes information corresponding to one or both of prioritization of resources and importance of specific resources as taught in Nagarajan et al since Nagarajan et al teaches simulation as an important process in documenting service level agreements (SLA) since simulation studies allow an Internet Service Provider (ISP) to verify their SLA agreements and check if it meets customer expectations and whether the specified service could be provided (section 1, paragraph 2, lines 4-6).

(10) Response to Argument

Claims 1, 13 and 21

Appellant begins by stating that in contrast to Chandra, Appellant's claimed subject matter is directed at <u>generating a service level agreement</u> rather than the actual allocation of resources while in the process of providing those resources.

The Examiner would like to point out that while Appellants' claims contain a limitation to generate a new service level agreement (different from the service level agreement already in place), they also contain limitations for creating a resource profile corresponding to a dynamically allocated subset of computing resources and modifying this resource profile either during simulation according to the service level agreement or based upon the service level result. Therefore, it is the Examiner's position that the claims are *also* directed to the allocation and re-allocation of resources in the computing environment. Further, the Examiner would like to point out that a service level agreement is already in place by the claim limitations, and that a new service level

agreement is *only generated in the event that* the resource profile cannot process the workload profile at an expected service level corresponding to the service level agreement. It is understood from Appellants' claims that if it is determined that the resource profile does process the workload at an expected service level, the service level agreement is reached, and a new one does not need to be generated.

Appellant argues that there is no teaching or suggestion in Chandra directed to modifying an agreement such as a SLA.

The Examiner notes that Appellant's claims set forth "generating a <u>new</u> service level agreement..." The claims do not set forth that the existing service level agreement is <u>modified</u>. Further, the Examiner set forth that Chandra does not expressly teach the generation of a new service level agreement. The Examiner cites D'Arienzo, whom clearly teaches the modification or generation of a new service level agreement (page 1405, column 2, paragraph 1, lines 7-11). It is the Examiner's position that the limitation of "generating a new service level agreement" is taught or suggested by the combination of Chandra and D'Arienzo.

Appellant argues that D'Arienzo does not address the deficiency that Chandra does not teach or suggest modifying an agreement such as a service level agreement because although D'Arienzo mentions that an agreement may be re-negotiated or replaced, neither D'Arienzo nor Chandra, either alone or in combination, describe any mechanism by which this can be accomplished.

The Examiner notes that Appellants' claims do not set forth any "mechanism" by which a service level agreement can be modified or generated anew. Therefore, it is the Examiner's position that the combined teachings of Chandra and D'Arienzo teach or suggest Appellants' claim limitations.

Appellant argues that Chandra does not even mention service level agreements and is therefore an inappropriate basis for a rejection of Appellants' claims.

It is the Examiner's position that Chandra is an appropriate basis for a rejection of Appellants' claims. Chandra is directed to simulations performed to evaluate dynamic resource allocation techniques that are necessary in the presence of dynamically varying workloads to provide "guarantees" to web applications, that is, meet a specified quality of service, running on shared data centers (see Abstract; Conclusion, paragraph 1; page 2, section B, paragraph 1, lines 2-4; page 8, section C.1, lines 5-8; page 10, section C.2, last paragraph). It is understood that the "QoS requirements" and "guarantees on resource availability and performance" that is provided in return for the payment for server resources by the application owner as taught by Chandra (see page 1, section A, paragraph 1, lines 6-13 and paragraph 2, lines 5-8) is a service level agreement (also, for further description of a service level agreement as known in the prior art, see cited, US Patent 6, 701,342, column 5, lines 10-14 that recites that the quality of service level is defined by terms set forth in a service level agreement). Further, the dynamic allocation techniques as set forth in Chandra are used to dynamically modify resources such that a specified QoS is met (page 1, column 2, lines

18-29), thereby managing a service level agreement though this dynamic allocation of resources to ensure that the guarantees are met.

Further, the Examiner notes the following from Appellants' arguments: "…While Chandra addresses techniques for the reallocation of resources among competing users, perhaps for the purpose of providing resources to satisfy a particular agreement,…". Therefore, the Examiner understands that Appellant also views the teachings of Chandra as techniques for allocating resources in order to meet an agreement, for instance, a service level agreement.

Appellant argues that there is simply no expectation that Chandra would be combined with D'Arienzo by one with skill in the corresponding arts because D'Arienzo is directed to an entirely different technology than Chandra.

It is the Examiner's position that the arts are analogous and therefore, the combination is proper. As recited by the Examiner, Chandra and D'Arienzo et al are analogous art since they are both directed to the management of network resources to meet quality of service requirements (see Chandra: Abstract, specifically, "dynamic resource allocation techniques are necessary…to provide guarantees to web applications…We present online workload prediction and optimization-based techniques to dynamically allocate resources to competing web applications"; D'Arienzo page 1403, column 2, paragraph 2, lines 3-7, "In the case the customer agrees with the terms of the contract...the RM will be in charge of operating the device configuration...", page 1403, column 2, paragraph 4, lines 7-11, "...prepare the SLA and subsequently map the

SLA...to be instantiated in cooperation with the Resource Mediator", page 1403, column

2, paragraph 5, lines 8-11, "...update the service level management system with new

rules and configuration as required in conjunction with the Resource Mediators").

Appellant argues that the Examiner is combining two unrelated references, at

least of one of which is unrelated to Appellants' claimed technology, i.e., the monitoring

and management of an SLA.

As discussed above, it is the Examiner's position that the arts are analogous.

Further, it is the Examiner's position that the references are related to Appellants' claim

terminology, that is, a method for *predicting service level* in a utility computing

environment having a dynamically allocated subset of computing resources and

generating a new service level agreement. As discussed above with respect to the

"management" of a service level agreement, it is unclear to the Examiner how a service

level agreement is "managed", if a new one is "generated" as set forth in the claims. For

example, the claims do not set forth that the existing service level agreement, or the

components that make up the service level agreement, are modified so that the

agreement is maintained, which would suggest that the existing service level agreement

is "managed". Further, Appellants' claims do not set forth an on-going "monitoring" of a

service level agreement. Rather, the processing of a workload profile using the resource

profile is simulated, a service level result is produced, the resource profile is modified

according to the service level result and a new service level agreement is generated if

necessary. There is no indication that this process is iterative and that the service level agreement is constantly monitored.

Appellant argues that a citation of Chandra (page 1, column 2, **paragraph 2**, lines 18-29) is mischaracterized to correspond to elements of Appellants' claimed subject matter. Specifically, this excerpt is mischaracterized as a "resource profile" when, if anything, it seems to be directed more to the idea of a workload profile or a demand profile, and that the Examiner "seems" to rely upon this excerpt for a "resource profile", a "workload profile" and a "demand profile".

It is the Examiner's position that this citation of Chandra is not mischaracterized to correspond to elements of Appellants' claims. This cited section of Chandra, relied upon to show the creation of a resource profile corresponding to a dynamically allocated subset of computing resources allocated according to a service level agreement, teaches the dynamic allocation of resources (creation of a resource profile), that is, how and what resources are allocated, based on the needs (workload) of an application, such that guarantees provided to each application are met. While workload is briefly mentioned, the Examiner does not understand Appellants' argument that this citation is *more* directed to a workload profile or demand profile. Further, the Examiner did not rely upon this citation of Chandra for "workload profile" or "demand profile", therefore, it is the Examiner's position that Appellants' statement that the Examiner "seems" to rely on this excerpt for a "resource profile", a "workload profile" and a "demand profile" is incorrect.

Referring to page 12, paragraph 39, lines 3-12 of the Final Office Action, dated

9/22/08, Appellant argues that the Examiner has inappropriately relied on the preambles

of the claims to infer the claim limitations.

It is the Examiner's position that the preambles of the claim limitations were not

relied upon alone to infer the claim limitations. In fact, in the lines that conclude the

paragraph in question, the Examiner discusses a particular limitation of the claims and

discusses how this limitation is understood and met by the prior art, based on not only

the preambles, but on the wording of the claim limitation itself. A copy of the paragraph

in question is below:

"Applicant argues that Chandra is directed to the monitoring and management of

actual resources in a computing environment, not to the monitoring and management of

a service level agreement (page 11). The Examiner would like to note that the claims

are directed to (claim 1) "a method of predicting service level", (claim 13) "a system for

simulating service in a utility computing environment having a first service level

agreement" and (claim 21), "a computer program product for predicting service level

compliance in a utility computing environment having a service level agreement"

wherein a simulation of the processing of a workload profile using a dynamically

allocated resource profile is run to produce a service level result, and wherein a

new service level agreement is generated if the resource profile cannot process

the workload profile at an expected service level corresponding to the service

level agreement. It is unclear to the Examiner how a service level agreement is

"managed", if a new one is "generated" as set forth in the claims. For example,

the claims do not set forth that the existing service level agreement, or the

components that make up the service level agreement, are modified so that the

agreement is maintained, which would suggest that the existing service level

agreement is "managed". Further, Chandra is directed to simulations performed

to evaluate dynamic resource allocation techniques that are necessary in the

presence of dynamically varying workloads to provide guarantees (QoS

requirements) to web application running on shared data centers (see Abstract

and Conclusion, paragraph 1 and page 10, section C.2, last paragraph). These

simulations taught by Chandra, as set forth in the citations by the Examiner,

predict service level by simulating the processing of a workload profile using a

dynamically allocated resource profile thereby producing a service level result as

set forth in the claim limitations. The Examiner sets forth that Chandra does not

explicitly teach "generating a new service level agreement", but that these limitations

are taught or suggested by the combination of Chandra and D'Arienzo et al as set forth

above."

Claims 8, 18 and 25

Appellant argues that the claims are directed to "comparing the workload profile

to a second workload profile…wherein the simulation is based upon the comparison"

and that the cited portion of Chandra (page 9, section C.2, paragraphs 1 and 2) is

comparing two different applications for the purpose of resource allocation rather than to

use as the basis of simulation.

The Examiner notes that Figures 8 and 9 were also cited. It is the Examiner's position that the limitation of Claims 8, 18 and 25 are taught by the cited portions of Chandra. Specifically, as discussed in C.2, paragraph 1, two workloads are used, that is the "World Cup trace" and the workload generated using "Poisson arrivals and deterministic request sizes", and a comparison of those two workloads is shown in Figure 8(a). These workloads, that are compared as shown in Figure 8(a), and combined to produce a total load on the system (also shown in Figure 8(a)), are used in the simulation to determine the allocation of resources and system discontent over time (as discussed in C.2, paragraph 2 and Figure 9).

Appellant further argues that claims 8, 18 and 25 are allowable because each depends upon one of the allowable independent claims.

It is the Examiner's position that the limitations of the independent and dependent claims are taught or suggested by the cited prior art.

Claims 2-4, 7, 10, 12, 14-17, 20, 22-24 and 27

Appellant argues that Claims 2-4, 7, 10, 12, 14-17, 20, 22-24 and 27 are allowable because each depends upon one of the allowable independent claims.

It is the Examiner's position that the limitations of the independent and dependent claims are taught or suggested by the cited prior art.

Claim 5

Appellant argues that Claim 5 is allowable because each depends upon an allowable independent claim and further, Chan does not teach or suggest any of the elements Appellants have argued are lacking in Chandra and D'Arienzo.

It is the Examiner's position that the limitations of the independent and dependent claims are taught or suggested by the cited prior art.

Claim 6

Appellant argues that Claim 6 is allowable because each depends upon an allowable independent claim and further, Sheets does not teach or suggest any of the elements Appellants have argued are lacking in Chandra and D'Arienzo.

It is the Examiner's position that the limitations of the independent and dependent claims are taught or suggested by the cited prior art.

Claim 11

Appellant argues that Claim 11 is allowable because each depends upon an allowable independent claim and further, Nargarajan does not teach or suggest any of the elements Appellants have argued are lacking in Chandra and D'Arienzo.

It is the Examiner's position that the limitations of the independent and dependent claims are taught or suggested by the cited prior art.

Prima Facie Case Established

Appellant argues that a prima facie case of obviousness has not been established because the prior art fails to teach or suggest all the claim limitations.

It is the Examiner's position that all claim limitations have been addressed and are supported by the prior art of record as set forth in the Final Office Action dated 9/22/08, and as discussed above.

The Examiner directed Appellant to the teachings of D'Arienzo who teaches an automatic mechanism for Service Level Agreement (SLA) management that can lead to cost reduction and enable the creation of short term services (Conclusions, lines 7-9) as an improvement to current interconnections among IP networks that are established by means of SLAs which require high manual overhead and a high associated cost and cause a non-optimized resource allocation of resources within the network (Abstract, lines 7-12). It is the Examiner's position that this passage referred to in D'Arienzo provides a clear and adequate suggestion to combine the teachings of Chandra and D'Arienzo et al.

Further, the Examiner pointed out that both Chandra and D'Arienzo are directed to the management of network resources to meet quality of service requirements, therefore, the arts are considered analogous. It is the Examiner's position that a reasonable expectation of success would be present in the combination of the teachings.

The Examiner concludes that a prima facie case of obviousness has been established and the rejection is proper.

For the above reasons, it is believed that the rejections should be sustained.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the

Related Appeals and Interferences section of this examiner's answer.

Respectfully submitted,

/Mary C Jacob/

Examiner, Art Unit 2123

/Paul L Rodriguez/

Supervisory Patent Examiner, Art Unit 2123

Conferees:
Paul Rodriguez
/Paul L Rodriguez/
Supervisory Patent Examiner, Art Unit 2123

/Albert DeCady/
Supervisory Patent Examiner, Art Unit 2121